



DEPUTY ASSIGNMENT AND RESOURCE TRACKING (DART)

PROJECT YEAR 2013-2014

CUSTOMER DEPARTMENT(S): Richmond County Sheriff's Office (RCSO)
Augusta 911 Center

PROJECT COST \$0 (in-house Information Technology-development project)

CUSTOMER NEED

The Deputy Assignment and Resource Tracking (DART) program is a response to a need identified by the RCSO in regard to determining the availability of Sheriff's Deputies for work on any given day or shift. As technology has become more accepted into use by the RCSO, supervisors have begun to apply it to manage daily schedules. The tool adopted by the RCSO for this purpose was Microsoft Excel, and the SO evolved a fairly complex set of spreadsheets that were used to track 1) daily reports in the precincts and 2) daily reports of department-wide availability for command staff to review. There was a great deal of copy-and-paste involved from day-to-day. The process evolved over time so that everyone was familiar with it, but it was not efficient and it did not let supervisors capture information beyond the current day. For instance, if Deputy Jones would be off for two weeks, his or her supervisor would need to record that change every day on the squad roster. Additionally, subtle differences between the spreadsheets used by the various divisions developed over time as the command staff sought to improve upon the information. The need for consistency and continuity became apparent.

The RCSO conducted daily operations with the spreadsheets *generally* in the following manner:

1. At the beginning of the shift, deputies reported in to their supervisors.
2. Supervisors updated the spreadsheets for the daily shift roster and the overall roster.
3. Spreadsheets were submitted to command staff and E911 via email. The information was submitted to E911 so that they would know the vehicles that were available for calls.

For security and force protection purposes the roster won't be shown here with personnel names, but the blank form is shown below:

PROJECT DESCRIPTION

The RCSO approached IT about finding a more elegant solution that would meet their needs in terms of determining their force availability. IT staff met with the RCSO command staff and developed the following general initial project requirements:

- Data entry
 - System that permits RCSO personnel to be entered with their shift, work schedule, division, beat#, personal equipment, vehicle assignment, and vehicle equipment/resources.
 - Updates to any of the information listed above.
- On-the-fly reporting that indicates when deputies are scheduled to work, which deputies are on vacation or other leave, which car they are assigned to, etc. on a simple report which permits querying/filtering and customization.
- Report that identifies dates/times with uncovered/unassigned responsibilities
- Security that permits access to the system to be restricted to certain personnel, with levels of security indicating who can view or edit accordingly.
- Not restricted to city network access. For example, means must be available to connect while off-duty, at home, etc.
- Capability for non-RCSO personnel (such as 911) to view rosters so that they can set up data within their system.
- Can email, text, etc. everyone on a shift or in a group that needs to be alerted or updated with important information.
- Ability to record opportunities for “specials” and permit deputies to sign up for them. System will be able to track # of specials that a deputy has been able to serve so that opportunities can be given equitably.
- Capability to import deputy information from Microsoft Excel, CSV, or TXT formats.
- Support
 - Online help tools to assist staff with data entry and staff assignment tasks.
- Mobile access via Android and MacOS devices.

IT conducted some online research and determined that there were private software firms that had already created Software-as-a-Service (SaaS) systems – vendor-hosted, of course – that would fulfill these same functions. The cost of one particular system would have cost the RCSO more than **\$50,000 per year** for the number of deputies that would potentially be managed using the software. The RCSO balked at the price tags associated with these applications; however, and the decision was made to create an application in-house using IT’s Development team. There is a tradeoff here – the system would not include all of the tools that RCSO had requested initially (such as wide-open web access), but they would have more than enough to make the package effective.

In truth, this project became an interesting and sometimes frustrating partnership for the RCSO and IT. The project was a victim of continual “scope creep” meaning that the requirements changed frequently. In all cases these were “good” changes that meant that the Sheriff’s Office was thoroughly reviewing IT’s work and recommending changes that would make the tool more effective. If the project had a motto it would have been “That’s perfect. Now can we add one more thing...”. This was a new frontier for both agencies. The original set of requirements was nearly invalidated as time passed, but the end result was a much more user-friendly, capable, and feature-rich application than was originally envisioned. The program and its capabilities are explored in the following pages.

THE DART PROGRAM

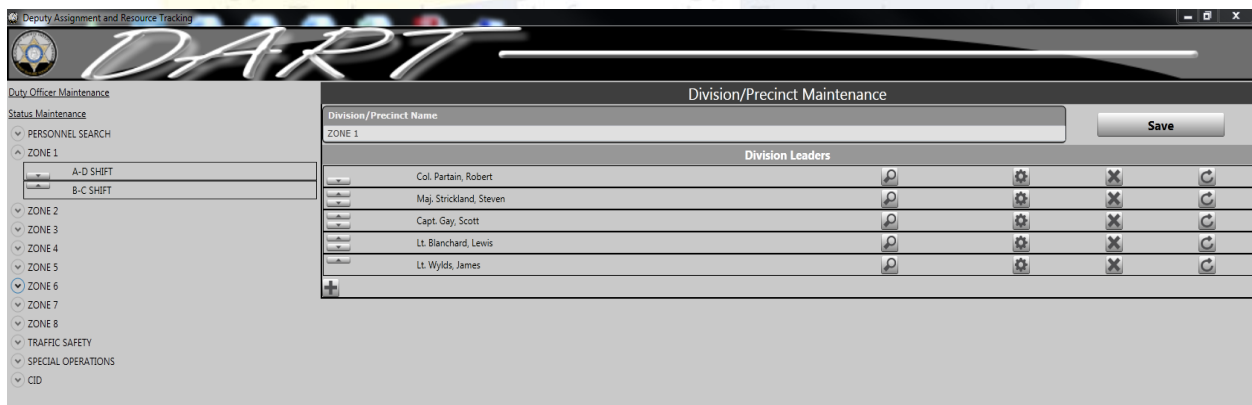
The application in its final form offers the RCSO *most* of the originally-promised tools (with the exception of Mobile access, city network access limitations, and the ability to manage “specials”). Preliminary work has already begun on Phase II, which would include the ability to manage Specials.

There are two components to the DART program: 1) A front end that shows the results of the rosters in a web-friendly format, and 2) a back-end data entry and maintenance application. The data entry and maintenance application is described below.

The main screen appears to the right. It permits the user (based on security) to update the duty officers for each shift, plus the personnel assigned to any particular zone and shift. Supervisors were granted security rights.

The program offers supervisors the ability to track deputies by “Zones”. The RCSO formerly used traditional police “beats”, but changed over to larger, more flexible zones in May 2014. One of the project scope creep issues was that, during initial requirements gathering, the Zones were not a subject of discussion. When the RCSO adopted the Zone concept and decided to abandon the more traditional police “beats”, it necessitated a redesign of some of the program’s core features.

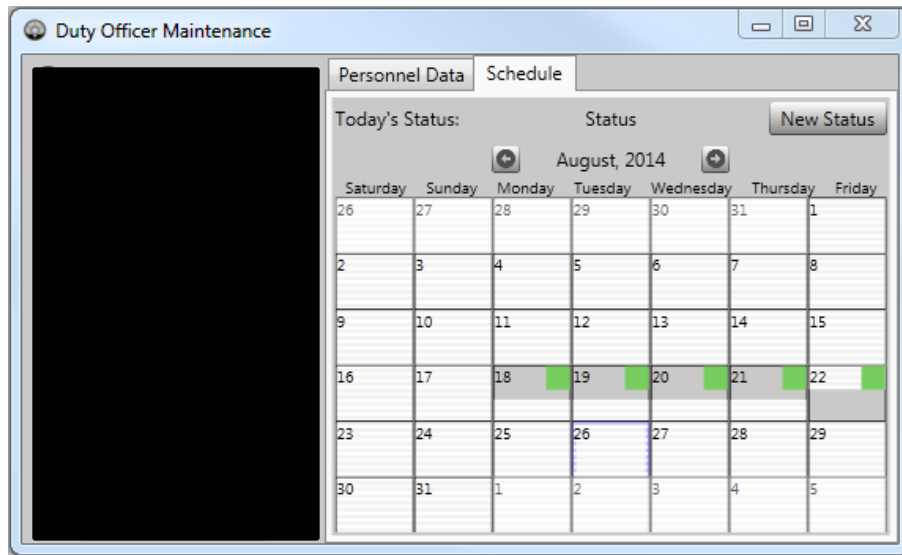
Once supervisors enter the program, they have the capability to assign leaders for the various divisions in the department. This information is important for the reports that are made available so that the chain of command for the shift is known to the personnel viewing the site.



The **Shift Page**, shown below, permits supervisors to set deputies up to work particular shifts. The calendar is one of the stronger features of this page, because it permits the supervisor to set up a deputy’s work schedule for up to six months in advance. That change is a major shift from the former method. This system permits supervisors to project what their shift roster will look like months in advance so that they can plan for events and operations! The column on the left can be expanded so that all the deputies on a shift are shown. If a deputy has called in sick, or is called in to court, the supervisor can use drag-and-drop capability to remove them from the shift for the time period in which they are out. Updates performed in this manner are reflected automatically in the view-only web site created for command staff and 911 personnel.

The system also has the capability to track officers' equipment and capabilities. The **Duty Officer Maintenance** screen shot below illustrates the equipment, assignments, etc. that the deputy has access to. This feature permits a supervisor to use the program to quickly determine which deputy on his/her shift has equipment or skills that might be needed in an emergency situation, such as negotiator training or SWAT training. The black areas of the screen have been redacted so that officer name and equipment information is not publicly-released.

The Schedule tab of the maintenance screen, shown below, permits the viewer to see when the deputy is working.



The end result of entering all of this information into the DART program is that it becomes available in the view-only web site created for command staff and 911 personnel. Due to the fact that everyone was familiar with the previously-used spreadsheet, every effort was made for the view-only tool to look similar. The new version is shown below, and you can compare it with the view shown on page 2 of this document.

ACTIVE GROUPS

ZONE 8

TRAFFIC SAFETY

SPECIAL OPERATIONS

CID

TRAFFIC SAFETY

Sgt. Whitehead, Danny

Sgt. Redmon, Scott

Lt. Lamkin, Ramone

| TRAFFIC SQUAD 21 | | | MOTORCYCLE TEAM 10 | | | H.E.A.T. 3 | | |
|------------------|------------------------|--------------|--------------------|------------------------|----------|------------|----------------------|--|
| C-14 | Cpl. Benson, Charles | FTO | C-16 | Cpl. Pletcher, Michael | FTO AR15 | C-19 | Cpl. Reeves, Brandon | |
| C-16 | Cpl. Pletcher, Michael | VID FTO AR15 | C-15 | Cpl. Morrison, Barry | FTO | T20 | Parrish Jr., Albert | |
| C-15 | Cpl. Morrison, Barry | FTO | | | | T21 | Darling, Hoy | |
| T11 | Bennerman, Anthony | | T33 | Johnson, Brian | FTO | | | |
| T12 | Davis, Jr, Calvin | FTO AR15 | T34 | Cramer Jr., Charles | | | | |
| T13 | Singletary, Jason | FTO AR15 | T35 | Olivares, Jonathan | | | | |
| T15 | Martin, Jo | FTO | T36 | Gandy, Brandon | | | | |
| T17 | Schaffer, Russell | | T37 | Bunch, Peter | | | | |
| T2 | Bryant Jr., Robert | VID FTO AR15 | T41 | Wasson, Phillip | | | | |
| T5 | Geisen, William | VID | T42 | Wright, William | FTO | | | |
| T7 | Barnett, Phillip | FTO AR15 | T44 | Hardin, Timothy | | | | |
| T8 | Tucker, Christopher | VID FTO AR15 | | | | | | |
| T9 | Skinner, Terrell | FTO | | | | | | |
| | Digiacomo, Aaron | | | | | | | |
| | Usry, Allen | FTO | | | | | | |
| | Edenfield, George | | | | | | | |
| | Adams, Darryl | | | | | | | |
| | Alspaugh, Alan | FTO AR15 | | | | | | |
| | Jones, Stephen | | | | | | | |
| | Not Filled | | | | | | | |
| | Phillips, Aaron | FTO | | | | | | |
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PROJECT STATUS

The DART system is live and in use by the RCSO. The RCSO has adopted their own internal training methodology to get supervisors involved in using the software. IT continues to make modifications to provide more capability to the software, and expectations are high for its continued improvement and expansion.